

Claims

1. An electric power tool, having an electric motor acting to drive a tool,
5 characterized by a sensor unit, which detects the contact pressure of the tool (6)
against a workpiece (7) and cooperates with a signal transducer (10).

2. An electric power tool, having an electric motor acting to drive a tool, in
particular in accordance with claim 1, and having a control and/or regulating unit
10 serving to guide the operation of the electric motor, characterized by a sensor unit,
which detects the contact pressure of the tool (6) against a workpiece (7) and
cooperates with the control and/or regulating unit (20).

3. The electric power tool in accordance with one of the foregoing claims,
15 characterized in that the sensor unit (9) has a strain gauge and/or a piezoelectric
sensor.

4. The electric power tool in accordance with one of the foregoing claims,
characterized in that the sensor unit (9) has a current-measuring device (23),
20 which detects the current of the electric motor (8).

5. The electric power tool in accordance with one of the foregoing claims,
characterized in that the current- measuring device (23) has a shunt (31), through
which the motor current flows, and an electronic evaluation unit (36).

25 6. The electric power tool in accordance with one of the foregoing claims,
characterized in that the signal transducer (10) is an optical and/or an acoustical
signal transducer (12, 13) and/or a signal transducer (14) that calls on the sense of
touch.

7. The electric power tool in accordance with one of the foregoing claims, characterized in that the optical signal transducer (12) is at least one LED (15, 16) and/or an LED array (17) and/or a display (19) and/or a bar display (18).

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8. The electric power tool in accordance with one of the foregoing claims, characterized in that the acoustical signal transducer (13) is a speaker and/or a bell.

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9. The electric power tool in accordance with one of the foregoing claims, characterized in that a device that has a sound output, in particular a speech output, is associated with the speaker.

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10. The electric power tool in accordance with one of the foregoing claims, characterized in that the control and/or regulating unit (20) controls and/or regulates the torque of the tool (6), or of a tool receptacle (6'), as a function of the contact pressure of the tool (6) against the workpiece (7).

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11. The electric power tool in accordance with one of the foregoing claims, characterized in that the control and/or regulating unit (20) controls and/or regulates the rotary speed of the tool (6), or of a tool receptacle (6'), as a function of the contact pressure of the tool (6) against the workpiece (7).

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12. The electric power tool in accordance with one of the foregoing claims, characterized in that the control and/or regulating unit (20) controls and/or regulates the torque of the tool (6), or of a tool receptacle (6'), as a function of the contact pressure of the tool (6) against the workpiece (7) at a predetermined rotary speed.

13. A method for guiding the operation of an electric power tool that has an electric motor, in particular having a sensor unit and having a signal transducer in accordance with one of the foregoing claims, characterized by the following steps:

- determining the contact pressure of the tool against the workpiece;

5 - outputting the contact pressure to enable the changing of the contact pressure of the tool by the user.

14. A method for guiding the operation of an electric power tool that has an electric motor, in particular having a sensor unit and having a signal transducer in accordance with one of the foregoing claims, characterized by the following steps:

- determining the contact pressure of the tool against the workpiece;

10 - automatically adjusting the torque of the electric motor, of a tool, and/or of a tool receptacle, as a function of the contact pressure, in particular taking a predetermined rotary speed into account.